

ARCHITECTURE

VOL. XXVII.

APRIL 15, 1913.

No. 4

ARCHITECTURE, conducted by a Board of Architects in the interests of the profession, is published the fifteenth of every month by FORBES & COMPANY, LTD., (A. H. Forbes, Pres.), 527 Fifth Avenue, New York.

PRICE, mailed flat to any address in the United States, Mexico or Cuba, \$5.00 per annum, in advance; to Canada, \$6.00 per annum; to any foreign address, \$7.00 per annum.

ADVERTISING RATES upon request. The writing and displaying of advertisements is an art in itself, and the publishers will be pleased to give the Advertiser the benefit of an Expert's experience in this line at no additional expense.

ENTERED at the New York Post Office as second-class mail matter.

PLATES AND ILLUSTRATIONS.

ST. PATRICK'S R. C. CHURCH, Philadelphia.

Exterior, - - - - -	Plate XXX
Interiors, - - - - -	- 74 and 76

LaFarge & Morris, Architects.

BREARLEY SCHOOL, New York.

Exterior, - - - - -	Plate XXXI
Entrance, - - - - -	Plate XXXII
Details of Elevation, - - - - -	Plate XXXIII
Plans, - - - - -	Plate XXXIV

McKim, Mead & White, Architects.

RESIDENCE, J. B. Duke, New York.

Exterior, - - - - -	Plate XXXV
Entrance, - - - - -	Plate XXXVI

Horace Trumbauer, Architect.

MUTUAL BANK, New York.

Exterior, - - - - -	Plate XXXVII
Banking Room, - - - - -	Plate XXXVIII
Plans, - - - - -	- 86

Donn Barber, Architect.

COUNTRY HOUSE ON LONG ISLAND.

Exterior, - - - - -	Plate XXXIX
Fore-Court and Main Entrance, - - - - -	Plate XL
North Front from Sunken Garden, - - - - -	Plate XLI
Farm Buildings, - - - - -	- 77
Fore-Court, - - - - -	- 78
Entrance to Fore-Court, - - - - -	- 79

LaFarge & Morris, Architects.

HOUSE, Geo. L. Prentiss, Montclair, N. J.

Exterior and Plans, - - - - -	- 81
Details, - - - - -	- 80

W. Leslie Walker and G. H. Chichester, Architects.

HOUSE AND PLANS, Chas. S. Wentz, Germantown, Pa. - - - 82

Duhring, Okie & Ziegler, Architects.

HOUSE AND PLANS, Wm. B. Hart, Radnor, Pa. - - - 84

Duhring, Okie & Ziegler, Architects.

"ARCHITECTURE" SERIES OF MEASURED DETAILS, No. 10.

Copyright, 1913, by FORBES & COMPANY, LTD., 527 Fifth Ave., New York

AMERICAN INSTITUTE OF ARCHITECTS.



PRESIDENT,

WALTER COOK, New York.

FIRST VICE-PRESIDENT,

R. CLIPSTON STURGIS, Boston.

SECOND VICE-PRESIDENT,

FRANK C. BALDWIN, Washington, D. C.

SECRETARY AND TREASURER,

GLENN BROWN, Washington, D. C.

BOARD OF DIRECTORS.

FOR ONE YEAR—A. F. Rosenheim, Los Angeles, Cal., Thomas R. Kimball, Omaha, Neb., Milton B. Medary, Jr., Philadelphia, Pa.

FOR TWO YEARS—Irving K. Pond, Chicago, Ill., John M. Donaldson, Detroit, Mich., Edward A. Crane, Philadelphia, Pa.

FOR THREE YEARS—Burt L. Fenner, New York, C. Grant La Farge, New York, H. Van Buren Magonigle, New York.

EXECUTIVE COMMITTEE.

Walter Cook, New York. Glenn Brown, Washington, D. C.
R. Clipston Sturgis, Boston, Mass. Irving K. Pond, Chicago, Ill.
Milton B. Medary, Jr., Philadelphia, Pa.

CHAPTERS.

- ATLANTA CHAPTER, 1906.—President, John R. Dillon, Atlanta, Ga. Secretary, Eugene C. Wachendorff, Atlanta, Ga.
- BALTIMORE CHAPTER, 1870.—President, J. B. Noel Wyatt, Baltimore, Md. Secretary, Thos. C. Kennedy, Baltimore, Md.
- BOSTON CHAPTER, 1870.—President, R. Clipston Sturgis, Boston, Mass. Secretary, Chas. N. Cogswell, Boston, Mass.
- BROOKLYN CHAPTER, 1894.—President, Woodruff Leeming, New York. Secretary, J. Theodore Hanemann, New York.
- BUFFALO CHAPTER, 1890.—President, Edward B. Green, Buffalo, N. Y. Secretary, Ellicott R. Colson, Buffalo, N. Y.
- CENTRAL NEW YORK CHAPTER, 1887 (formerly Western New York Chapter).—President, Albert L. Brockway, Syracuse, N. Y. Secretary, Prof. F. W. Revels, Syracuse, N. Y.
- CINCINNATI CHAPTER, 1870.—President, A. O. Elzner, Cincinnati, Ohio. Secretary, John Zettel, Cincinnati, Ohio.
- CLEVELAND CHAPTER, 1890.—President, F. S. Barnum, Cleveland, Ohio. Secretary, G. B. Bohm, Cleveland, Ohio.
- COLORADO CHAPTER, 1892.—President, Maurice B. Biscoe, Denver, Col. Secretary, Arthur A. Fisher, Denver, Col.
- CONNECTICUT CHAPTER, 1902.—President, William E. Hunt, Waterbury, Conn. Secretary-Treasurer, Louis A. Walsh, Waterbury, Conn.
- DAYTON CHAPTER, 1889.—President, Robert E. Dexter, Dayton, Ohio. Secretary, H. J. Williams, Dayton, Ohio.
- ILLINOIS CHAPTER, 1869.—President, Elmer C. Jensen, Chicago, Ill. Secretary, H. Webster Tomlinson, Chicago, Ill.
- INDIANA CHAPTER, 1910 (formerly Indianapolis Chapter, 1887).—President, Rolland Adelsperger, South Bend, Ind. Secretary, Herbert Foltz, Indianapolis, Ind.
- IOWA CHAPTER, 1903.—President, Frank E. Wetherell, Des Moines, Iowa. Secretary-Treasurer, Eugene H. Taylor, Cedar Rapids, Iowa.
- KANSAS CITY CHAPTER, 1890.—President, Benj. J. Lubschez, Kansas City, Mo. Secretary, Charles H. Payson, Kansas City, Mo.
- LOUISIANA CHAPTER, 1910.—President, Chas. A. Favrot, New Orleans, La. Secretary, M. H. Goldstein, New Orleans, La.
- LOUISVILLE CHAPTER, 1908.—President, Mason Maury, Louisville, Ky. Secretary, Val. P. Collins, Louisville, Ky.
- MICHIGAN CHAPTER, 1887.—President, John Scott, Detroit, Mich. Secretary, Marcus R. Burrowes, Detroit, Mich.
- MINNESOTA CHAPTER, 1892.—President, Wm. Channing Whitney, Minneapolis, Minn. Secretary, Edwin H. Brown, Minneapolis, Minn.
- NEW JERSEY CHAPTER, 1900.—President, Hugh Roberts, Jersey City, N. J. Secretary, Chas. P. Baldwin, Newark, N. J.
- NEW YORK CHAPTER, 1867.—President, Robt. D. Kohn, New York. Secretary, Egerton Swartwout, New York.
- OREGON CHAPTER, 1911.—President, Edgar M. Lazarus, Portland, Ore. Secretary, H. A. Whitney, Portland, Ore.
- PHILADELPHIA CHAPTER, 1869.—President, John Hall Rankin, Philadelphia, Pa. Secretary, Horace Wells Sellers, Philadelphia, Pa.
- PITTSBURGH CHAPTER, 1891 (formerly W. Pa. Chapter).—President, O. M. Topp, Pittsburgh, Pa. Secretary, Rich'd Hooker, Pittsburgh, Pa.
- RHODE ISLAND CHAPTER, 1870.—President, Norman M. Isham, Providence, R. I. Secretary, John H. Cady, Providence, R. I.
- SAN FRANCISCO CHAPTER, 1881.—President, Geo. B. McDougall, San Francisco, Cal. Secretary, Sylvain Schnaittacher, San Francisco, Cal.
- SOUTHERN CALIFORNIA CHAPTER, 1894.—President, John C. Austin, Los Angeles, Cal. Secretary, Fernand Parmentier, Los Angeles, Cal.
- SOUTHERN PENNSYLVANIA CHAPTER, 1909.—President, J. A. Dempwolf, York, Pa. Secretary, Miller I. Kast, Harrisburg, Pa.
- ST. LOUIS CHAPTER, 1890.—President, E. C. Klipstein, St. Louis, Mo. Secretary, Wm. H. Gruen, St. Louis, Mo.
- WASHINGTON, D. C. CHAPTER, 1887.—President, T. J. D. Fuller, Washington, D. C. Secretary, Ward Brown, Washington, D. C.
- WASHINGTON STATE CHAPTER, 1894.—President, W. R. B. Wilcox, Seattle, Wash. Secretary, Charles H. Alden, Seattle, Wash.
- WISCONSIN CHAPTER, 1911.—President, Armand D. Koch, Milwaukee, Wis. Secretary, H. J. Rotier, Milwaukee, Wis.
- WORCESTER CHAPTER, 1892.—President, Stephen C. Earle, Worcester, Mass. Secretary, C. Leslie Chamberlain, Worcester, Mass.

STATE ASSOCIATIONS.

PENNSYLVANIA STATE ASSOCIATION, 1909.—President, Edward Stotz, Pittsburgh. Secretary, Richard Hooker, Pittsburgh.

The UNIVERSITY OF PENNSYLVANIA offers courses in ARCHITECTURE as follows:

1. A four-year course, leading to the degree of B. S. in Arch. An option in architectural engineering may be elected.
 2. Graduate courses of one year permitting specialization in design, construction, or history; leading to the degree of M. S. in Arch.
 3. A special two-year course for qualified draftsmen with options in design or construction; leading to a professional certificate.
- For catalogue giving complete information regarding requirements of admission, advanced standing, summer school and atelier work, fellowships and scholarships, and for illustrated year book, etc., address DEAN OF THE COLLEGE, University of Pennsylvania, Philadelphia, Pa.

TO THE NOUVEAU.

There are many other points in plans, beside fine central axes,
For many a building has them, which cannot pay even taxes
Columns do not Colonial make, cartouches are not all
There is in architecture French, spattered upon a wall.

Greek temples are not always banks, though we may worship
money,

And smear the classic air as thick as Hymettian honey.

A tower is conspicuous and makes a lot of talk

But if you can't restrain yourself, please look around New
York.

A façade never means a thing, unless the plan's expressed.

Beauty, utility combined, these are the final test.

Buildings you know must oft be built for use as well as
beauty;

So if you have achieved both ends, *perhaps* you've done your
duty.

EVERTS TRACY.

ARCHITECTURAL CRITICISM.

THE St. Patrick's Roman Catholic Church, Philadelphia, Pa., La Farge & Morris, Architects (Plate XXX) is another of the very interesting attempts which have been made to adapt Italian Renaissance forms and motives to present day American needs and conditions and in it have been retained both the good and bad qualities of the Renaissance work. The architects of the Italian Renaissance were in the earlier years of the movement never quite able to divest themselves of the Romanesque proportions, to which Classic forms were applied as a sort of veneer decoration, and the results were not infrequently extremely interesting and beautiful in detail, without being perfect in mass. Such one would judge this building to be from the photographs; it is of tremendous height, with a very flat roof, and a porch motive which is hardly knit completely into the fabric of the building, while the three large openings on the side appear to dominate the structure to an extent perhaps not completely desirable. This view of the building is advanced with some hesitation, since the writer has found that there are few parts of a building on which opinion may be more varied as to what constitutes correct mass; nearly every one seems agreed as to what type of detail is beautiful and fitting, and what is not, but the question of mass seems so purely a matter of individual sense of proportion that no criticism can be entirely unbiased by individual sentiment. There are in the United States few architects even of good reputation who can see little in the early Italian Renaissance work except its detail, and perhaps a greater number who can find nothing to condemn in any of the work of this period; and this is due, I think, less to an individual predilection to the matter of detail, than to varying beliefs as to what constitutes correct mass. As to all questions of detail in this structure, and as to the general proportion of the interior, it seems that every one must be agreed. The order has precisely the naive and simple qualities combined with exquisite sense of proportion that make the Italian work so uniformly interesting, and here it has been handled in a way quite as free from domination of tradition as was the work of the Renaissance; a thing I think very much

easier for the Renaissance architects than for those of to-day, because they were unhampered by previous attempts in the style and could build anew, while we have to forget our Classic training before we can boldly strike out in such an original composition. The window treatment, for example, could be designed only by a man with a very imperfect knowledge of Classic architecture, or by one able absolutely to subordinate his knowledge to his juster sense of pure design, and the fact that the motives used are traditional is no argument that their use in the particular and exquisite way in which they are employed in this building is mere archæology. There is no portion of the exterior which is without a distinct treatment which is not only of interest in itself, but composes well with the balance of the work, in spite of the fact that many portions of the exterior are very different in treatment and even in scale. The interior completely satisfies the eye; the constructive materials are frankly exposed to form decoration, the vaults are of herring-bone tile, the pilasters of brick and terra cotta, the floor of brick and stone, and the points of interest are as one would naturally desire of better materials, marble and bronze. Since the Columbia Chapel hardly a church has been published in which the construction has been a more important part of the design, or in which the structural fitness has been more completely satisfactory. Take for example the entrance wall—a plain surface pierced by three small doors, three small circular windows and a rose window; it is simply perfection.

IN the Brearley School, McKim, Mead & White, Architects (Plates XXXI-XXXIV) the demand for light has been allowed to dominate the design in a manner not at all customary in the work of McKim, Mead & White, and much less pleasant than most of the balance of their work. As seems inevitable in their design the details exhibit a very high order of taste and intelligence, but the building as a whole does not compel the respectful admiration which is caused by most of their executed work. The lower two stories form in themselves an exquisite piece of composition, with the circular windows below the small row of square ones, and the top formed by a lace-like balcony; but from that point on the architects have lost progressively both interest and scale, and the enormous height of the loggia on the top of the building is completely at odds with the domestic character of the first two stories

THE Mutual Bank, Donn Barber, Architect (Plates XXXVII-XXXVIII) is built on a narrow lot, and a certain amount of formal construction was evidently deemed necessary to express its purpose. The motive employed is necessarily compressed within a space somewhat narrower than the architect would have probably desired to have, and the antæ are in consequence a trifle pinched, a thing possible, without awkwardness, because of the firm lines of the adjoining buildings in assisting toward the lateral support. The three arches across the lower story, the center one enlarged to emphasize the door way, constitute a motive very seldom included in a façade of this type and have been an experiment well worth watching. The building seems as successful a solution as could have been arrived at when one considers the difficulties of space and façade treatment, and Mr. Barber has succeeded in obtaining a

monumental and dignified structure without the effort being too apparent. The interior, like the exterior, is of a conventional banking type, excellently well detailed, good in color, but, like the exterior, it seems the best that could be done with an extremely tough problem rather than the ideal. We must suppose that some sort of a lobby and vestibule was essential, and Mr. Barber has, by shoving forward the ceiling treatment, succeeded in keeping the interior quiet and unconfused in spite of a multitude of confused lines in plan. It has been very interesting to watch Mr. Barber's gradual development from the rather flamboyant type of his earlier work to the extremely delicate and refined style he now employs, without losing any of the virility of the earlier type.

THE NEW YORK COURT HOUSE COMPETITION.

MESSRS. FORBES & Co.,
527 Fifth Avenue, N. Y.

GENTLEMEN:

I notice in the March number of ARCHITECTURE a statement in regard to the programme of the competition for the Court House in the City of New York which is evidently based on a misapprehension of its conditions and which seems to me somewhat misleading.

The architect for the building is chosen by the Court House Board, which has instituted a competition for that purpose. It has in a number of cases been held by the Courts illegal for a public body to delegate absolutely such choice to an outside body; but the Board has appointed an advisory jury of architects to aid them in making it.

The programme provides for a prize of \$10,000 to be given to the author of the design deemed best by this jury, in case the Board does not agree with its conclusions. In that case, the Board, *being as yet uninformed as to the authors of the different designs*, makes its choice of a design and appoints its author as architect of the building.

As its choice is however restricted to one of the twenty-two invited competitors, all of whose names have been published, the conditions would hardly seem to warrant the statement in your article that "this provision opens the way to the discharge of the successful competitor and the employment by the Board of any incompetent politician it may choose."

The programme constitutes a formal contract between the Board and the competitors, and the strict observance of its conditions is equally binding upon both parties.

Your obedient servant,
WALTER COOK.

MARCH 20, 1913.

AN ACT TO AMEND THE GENERAL BUSINESS LAW, IN RELATION TO THE PRACTICE OF ARCHITECTURE.

Draft of a proposed New York State Law for Registration of Architects approved by the Board of Regents of the University of the State of New York and endorsed by the several New York State Chapters of the American Institute of Architects and by the New York Society of Architects.

Dated, March 1, 1913.

THE people of the State of New York, represented in the Senate and Assembly, do enact as follows:

SECTION 1. Chapter twenty-five of the laws of nineteen hundred and nine, entitled, "An act relating to general

business, constituting chapter twenty-five of the consolidated laws," is hereby amended by inserting therein a new article, to be article seven-a, to read as follows:

ARTICLE 7-A.

REGISTERED ARCHITECTS.

SECTION 77. Registered architects.

78. Board of examiners.

79-a. Certificates.

79-b. Violation of articles.

77. REGISTERED ARCHITECTS. Any person residing in or having a place of business in the State, who, before this article takes effect, shall not have been engaged in the practice of architecture in New York State, under the title of architect, shall, before being styled or known as an architect, secure a certificate of his qualification to practice under the title of architect, as provided by this article. Any person who shall have been engaged in the practice of architecture under the title of architect, before this article takes effect, may secure such certificate, in the manner provided by this article. Any person having a certificate pursuant to this article may be styled or known as a registered architect. No other person shall assume such title or use the abbreviation R. A., or any other words, letters or figures to indicate that the person using the same is a registered architect.

78. BOARD OF EXAMINERS. The regents of the university shall, within ninety days after this article takes effect, appoint a board of five examiners who shall make rules for the examination and registration of candidates for such certificates, subject to the approval of the board of regents. Such board of examiners shall be composed of architects, who have been in active practice in the State of New York for not less than ten (10) years, previous to their appointment, selected by the regents. Such examiners shall be entitled to such compensation for their services under this article as the board of regents shall determine, not exceeding in the aggregate the amount of fees collected from applicants for certificates.

79. QUALIFICATIONS; EXAMINATIONS; FEES. Any citizen of the United States, or any person who has duly declared his intention of becoming such citizen, being at least twenty-one years of age and of good moral character, may apply for examination or certificate of registration under this article, but before securing such certificate shall afford satisfactory evidence of having satisfactorily completed the course in an approved high school or the equivalent thereof and subsequent thereto of having satisfactorily completed such courses in mathematics, history and one modern language, as are included in the first two years in an approved institution conferring the degree of bachelor of arts. Such candidate shall in addition submit satisfactory evidence of at least five years' practical experience in the office or offices of a reputable architect or architects, commencing after the completion of the high school course. The board of examiners may accept satisfactory diplomas or certificates from approved institutions covering the course required for examination. Upon complying with the above requirements, the applicant shall satisfactorily pass an examination in such technical and professional courses as are established by the board of examiners. The board of examiners in lieu of all examinations may accept satisfactory evidence of any one of the qualifications set forth under subdivisions 1 and 2 of this Section.

1. A diploma of graduation or satisfactory certificate

from a recognized architectural college or school, together with at least three years practical experience in the office or offices of a reputable architect or architects; but the three years experience shall be counted only as beginning at the completion of the course leading to the diploma or certificate;

2. Registration or certification as an architect in another state or country, where the standard of qualifications for the same are not lower than those required by the board of examiners under this article;

3. The board of examiners in lieu of all examinations, shall accept satisfactory evidence as to the applicants character, competency and qualifications, and that he has been continuously and exclusively engaged in the practice of architecture for more than two years next prior to the date when this article shall take effect; or satisfactory evidence that the applicant has been actually and exclusively engaged in the practice of architecture on his own account

which he resides or maintains a place of business. The board of regents may revoke any certificate, if such action be recommended by the board of examiners, after thirty days written notice to the holder thereof, and after a hearing before the board of examiners, upon proof that such certificate has been obtained by fraud or misrepresentation, or upon proof that the holder of such certificate has been guilty of felony in connection with his practice of architecture.

79-b. VIOLATION OF ARTICLES. Any violation of this article shall be a misdemeanor, punishable for the first offense by a fine of not less than fifty and not more than one hundred dollars, and for a subsequent offense by a fine of not less than two hundred nor more than five hundred dollars, or imprisonment for not more than one year, or both.

2. This act shall take effect immediately.

EXTERIOR FINISHES FOR REINFORCED CONCRETE BUILDINGS.

E. E. SEELYE, CONSULTING ENGINEER.

HOW often has an architect in making the plans for a warehouse or factory, found that on taking bids, the cost has overrun the owner's expectation by twenty, thirty and even sixty per cent. Then the problem presents itself as to where the cost can be cut without affecting the utility or injuring the appearance of the structure. The writer has found that the exterior finish often presents a fruitful field for cutting.

Figure I. shows a building with a natural cement finish. On the right is a building six years old and to the left is the incomplete extension with its surfaces rubbed down but unpainted. The hollow metal windows on the front of the old building have given way to the cheaper and more efficient steel sash of the new building. The attention of the reader is called to the inherent beauty of this building, which with its extensive lighting areas, simplicity, strength, and natural cement finish is dedicated in every point to the purpose for which it was built.

In direct contrast to this type of construction is the building shown in Figure II. This building being the home of a confectionary industry, it is meet that it should be symbolical of neatness, cleanliness, and daintiness, and expense was not spared to attain these results.

Let us now look into the various finishes which are available; general precautions which should be observed in their execution, the results which may be expected from each and approximate costs of same.

The plain rubbed surface depends for its success mainly on the early removal of forms, so that form-marks may be rubbed out without plastering, and so that the glazed cement surface is easily broken down by the wooden float or carborundum brick. Common errors in this construction are the use of a cement facing when depositing the concrete, and the use of a cement wash or plaster when removing the form marks and irregularities. A moment's reflection will readily convince one that the cause of hair cracks in the surface is due to the above usages. Concrete shrinks in setting. As the stones do not shrink, the richer the concrete the greater the shrinkage, and a rich face mortar or wash naturally cracks up because it has a higher shrinkage coefficient than the interior mass. Hence, the writer recommends that no attempt be made to face with rich cement, and that the forms of exposed surfaces be removed,



I. MERGANTHALER LINOTYPE BLDG., BROOKLYN.
Albert Kahn and Ernest Wilby, Assoc. Architects.

or as a member of a reputable firm or association, for more than one year prior to the date when this article shall take effect; providing the application for such certification shall be made within one year of such date.

Every person applying for examination or certificate of registration under this article shall pay a fee of twenty-five dollars to the board of regents.

79-a. CERTIFICATES. The result of every examination or other evidence of qualification, as provided by this article, shall be reported to the board of regents by the board of examiners, and a record of the same shall be kept by the board of regents, and such board shall issue a certificate of registration to every person certified by the board of examiners as having passed such examination or as being otherwise qualified to be entitled to receive the same. Every person securing such certificate shall file the same with the county clerk of the county in



II. WALLACE CANDY FACTORY, BROOKLYN.
Howard Chapman, Architect.

if possible within 12 hours, and that the surface be rubbed down with a carborundum brick, the use of a very thin solution of neat cement in water applied with a brush being permitted. This is the cheapest form of concrete finish, its cost running from $\frac{1}{2}c$ per square foot up, depending on the degree of perfection desired, the length of elapsed time before the concrete is exposed for finishing, and the workmanship of the forms.

A surface left in this condition should not show surface cracks, and as for shrinkage and load cracks, a careful design should eliminate these. The surface will remain fairly uniform but may be expected to become, in time, discolored through efflorescence, rust streaks, and dirt. Then it may be painted.

It is well known, that concrete possesses an alkaline reaction which has a tendency to attack oil paints. This reaction is much less marked on concrete which has aged. It is probable that when concrete is green, it is not thoroughly dry, and that the moisture forms a vehicle for the solution of alkaline salts. At any rate when the concrete is thoroughly dried out, a good quality of oil paint may be used with success.

The exposed concrete above the first story of the building shown in Figure II. was treated with Sherwin-Williams cement coating, the precaution of allowing the concrete to age for three months having been taken, and the results are highly satisfactory although the building is only one year old.

On the building shown in Figure I. a compound known as Stone Tex manufactured by the Trussed Concrete Steel Co. is being used. This presents a dull sanded surface.

The above mentioned coatings belong to the class of specially prepared oil paints which are supposed to form a tough waterproof coating upon saponification. It is probable that this result may be best obtained by the addition of a suitable base at the time of application. There is need of some extensive experimentation along this line, which should be conducted for the enlightenment of the public, rather than for the benefit of a private manufacturer, as has too often been the case in the past.

Excellent painting results should be obtained at a cost of from $2\frac{1}{2}c$ to $3c$ per square foot.

A very ornamental finish may be obtained by tooling the surface. The first story of the building shown in Figure II. was treated in this manner. Tooling effectually eliminates surface cracks and hides discoloration. The cost of the tooling on the building in Figure II was $8\frac{1}{2}c$ per square foot including contractors profit. A gravel concrete is best adapted to tooling, which is done with a hammer and chisel.

Variations of tooling are what is known as bush hammering and picking. Bush hammering is done with a bladed hammer having notches at intervals on the blade. Picking is done with a sharp pointed hammer. Either treatment will serve the purpose of removing the form marks, and breaking up the surface film to prevent the fine shrinkage cracks from forming. The individual stones are not cleared and the appearance is not equal to hammer and chisel surface shown in Figure II. The cost of one bush hammered surface under the author's observation was $2c$ per square foot.

There is a tendency for tooled surfaces to show the effects of patching and to show construction joints. Hence it is well to leave a smooth band about two inches wide at the point where the construction joint occurs. This band is also left at corners and around openings, offsets, etc.

The Pebble-Dash effect is obtained by wire brushing, and washing, a green surface of gravel concrete until the individual stones are exposed. This treatment may be expected to cost in the neighborhood of $7c$ per square foot. A similar effect may be obtained by washing with a dilute acid solution. Pains must be taken to thoroughly hose out the surface so the acid action will not continue after the surface cement has been broken down and removed. This method has its special application where it is impossible to remove the forms before the concrete has become too hard for wire brushing.

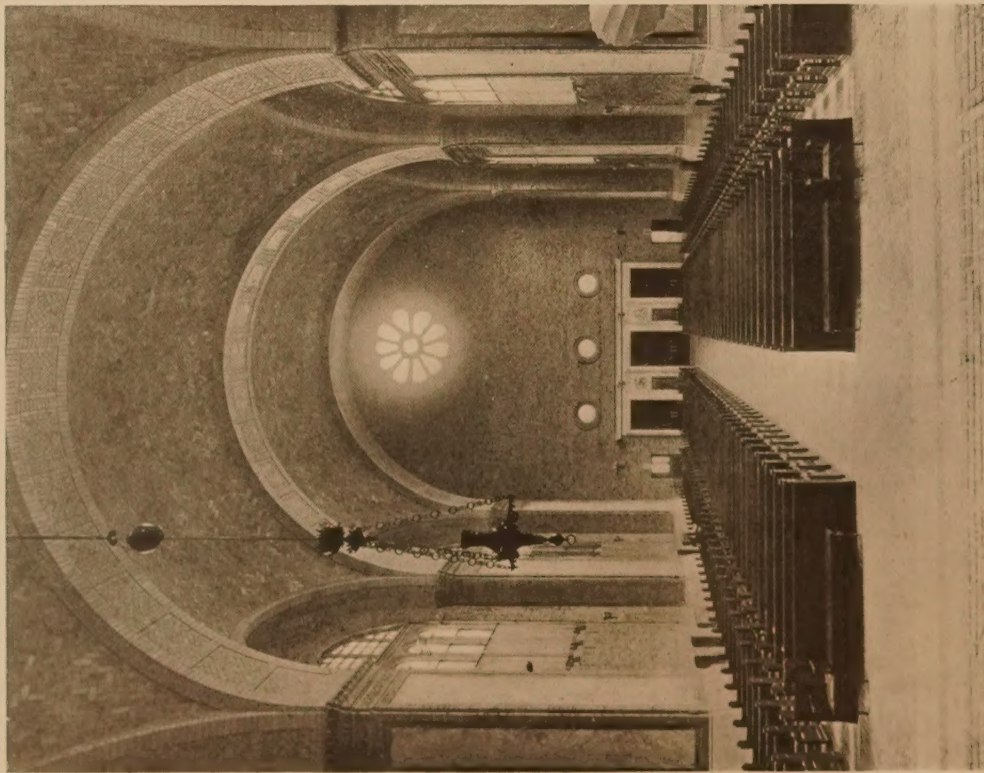
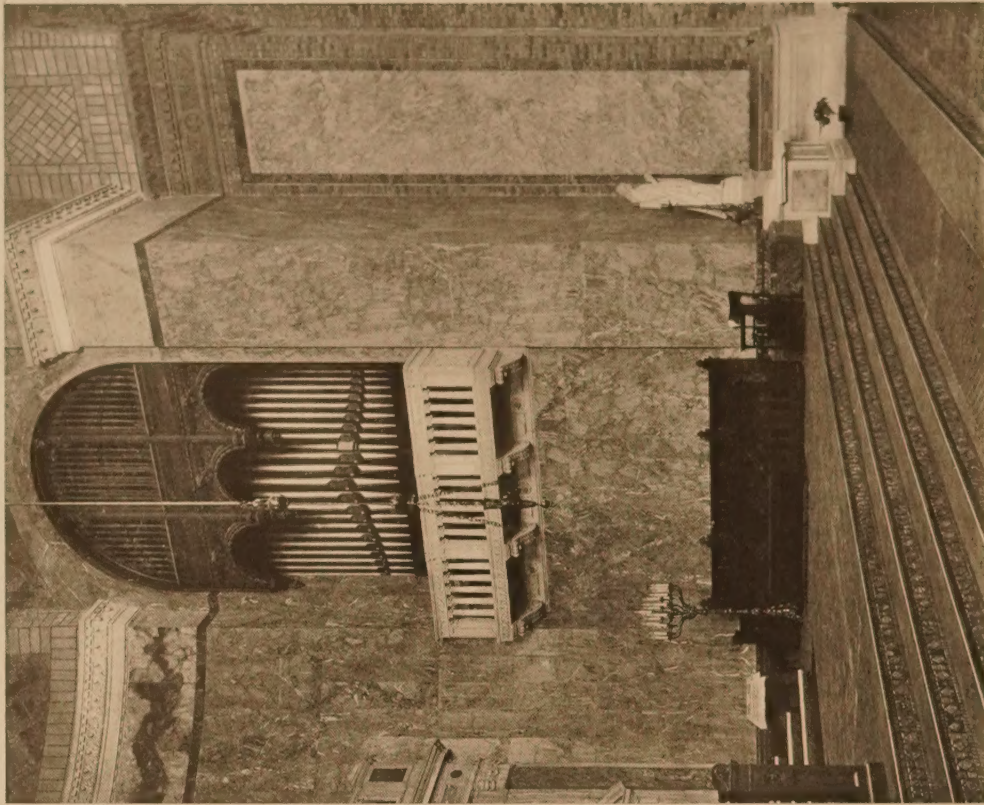
The stucco surface is familiar to all architects as used on tile block wall. Its application to concrete is identical: a proportion of 5 part cement, 12 part sand to 1 part lime paste being recommended. It cost in one case under the writer's observation, $5c$ per square foot.

Brick and stone veneers are the most expensive kinds of finishes for a concrete structure. The brick veneer is

(Continued page 75)



III. MEHLMAN PIANO FACTORY, WEST NEW YORK, N. J.
Balch & Beardsley, Architects.



INTERIOR LOOKING TOWARD ENTRANCE, AND ORGAN GALLERY, ST. PATRICK'S R. C. CHURCH, PHILADELPHIA.

LaFarge & Morris, Architects.

(Continued from page 73)

generally supported over windows on shelf angles attached to the concrete lintel beam by expansion or anchor bolts, and it is anchored to the concrete with wire ties. The stone veneer is held by steel anchors set into the stone and extending into the concrete. The cost of these veneers is proportionate to the class of material used. A treatment similar to that for the second, third, fourth and fifth stories of the building in Figure II, might be expected to run in the neighborhood of 25c per square foot.

An additional architectural effect may be obtained by using stone or concrete trimmings in connection with a brick veneer. This was done on the building shown in Figure III. Alternate estimates submitted for limestone, artificial stone, and blocks cast on the site ran, respectively, \$2.00, \$1.50 and \$1.00 per cubic foot. Blocks cast on the site were used, the same being cast in wooden moulds, reinforced, and treated with a cement wash to obtain uniformity.

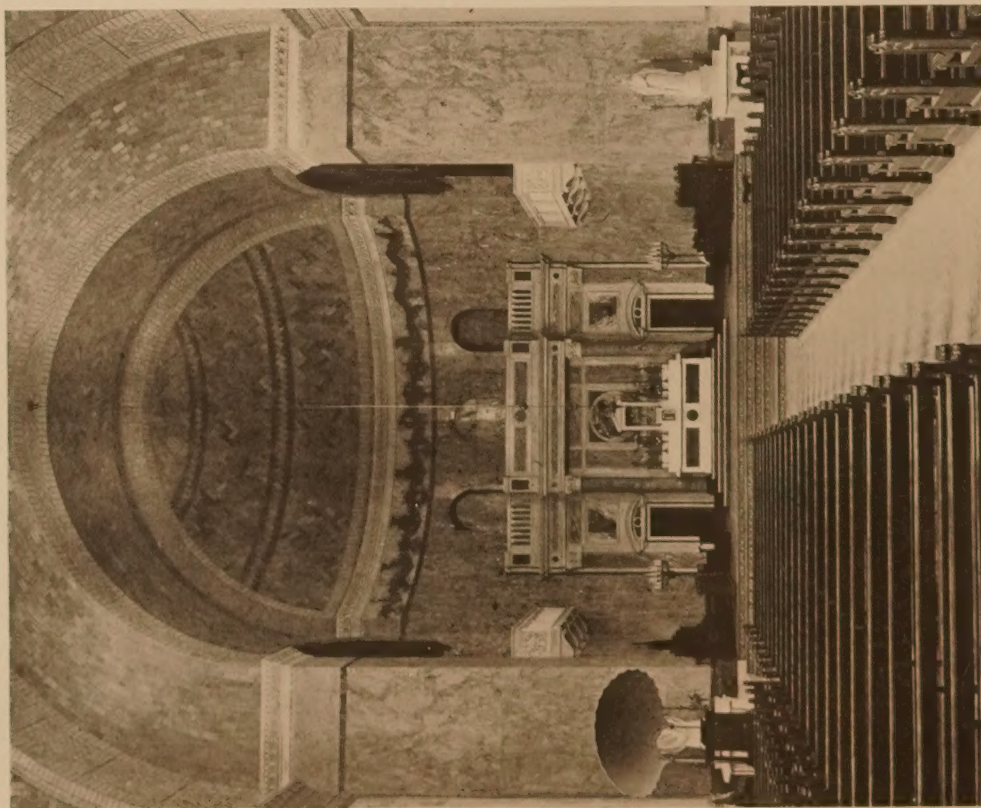
To sum up in general, the most expensive treatment of a concrete surface is very much cheaper than a veneer. A concrete surface may be obtained free from the ordinary objections of form marks, surface cracks, load and shrinkage cracks, and efflorescence if proper precautions are observed.

ENGLISH, CONTINENTAL AND AMERICAN HOSPITAL CONSTRUCTION.

MR. WM. MILBURN, in a paper recently read before the Royal Institute of British Architects, indicated briefly the various types of hospitals, their organization and management, and the general principles upon which their construction was based, passing on to compare the characteristic features of English, Continental and American institutions. The design and planning of the English general hospital has at the present time arrived at a definite type which, in its main outlines, is rarely departed from except in matters of detail, the system adopted being the pavilion principle of detached blocks connected together by corridors. The normal plan followed is that of a central administrative block, containing the administrative and domestic departments, on either side of which, and branching at right angles from a main corridor, are the ward pavilions, one, two, or three stories in height, with their central axes running north and south, whilst the operating blocks, out-patients', casualty and admission departments, and the medical school—the latter only found in clinical hospitals—are grouped in relation to the main corridor, the wards, and the entrances to the hospital. The nurses' and servants' homes are either self-contained blocks or a portion of the administrative block, whilst the laundry and power-house blocks and mortuary block are usually detached buildings, with separate access, and a detached isolation block is often provided. In English hospitals the large ward usually contains about twenty-four beds, and at its southern extremity two disconnected sanitary towers are placed, containing the baths, lavatories, and sanitary annexes, whilst between these towers is a balcony for open-air treatment, and at the entrance end of the unit, opening from a central corridor, are the small wards and the service and medical rooms. On sites of restricted area the problem of designing a hospital to comply with the hygienic requirements of aeration and ventilation to the wards demands much thought. There are, however, a number of hospitals in

which these difficulties have been overcome by the application of the radial principle to the ward blocks. The Poor Law infirmaries have in recent years greatly developed, and at the present day very many of these institutions can compare favorably in their design, construction, and equipment with many of the general hospitals erected under the voluntary system. At the present time very interesting developments are taking place in the design of isolation hospitals for infectious diseases, based on the modern medical opinion that infection in a hospital is usually conveyed by contact, and not by aerial convection, and the various systems in vogue, such as the "box" or "cubicle," "compartment" and "barrier," are of great interest. France for a long period has presented many valuable contributions to the science of hospital construction, such as the model hospital plan prepared by the Académie des Sciences as far back as 1786—the investigations of Tenon on the subject of the rebuilding of the Hôtel-Dieu, Paris—the remarkable series of hospitals designed by Tollet, with their one-story pavilions, with open basements, and the wards of ogival section—and at the present time, although a very large number of the hospitals of Paris are antiquated and quite out of date, there are a number of modern examples. The most recent Parisian general hospital, La Nouvelle Pitié, opened recently, with accommodations for about 1,000 patients, ranks among the great modern hospitals of the world. The site is some fifteen acres in extent, and of a most irregular shape; but the difficulties have been solved in a most interesting manner. The pavilions generally are of three stories of wards, the maximum number of beds per ward being twenty, and the whole of the buildings are connected together by a large subway—a characteristic feature of the Parisian hospitals—for food, linen, mortuary, and general services, but not for patients. The design of the two pavilions of the hospital attached to the Pasteur Institute at Paris is of great interest, as here it has been demonstrated that it is possible to treat patients suffering from infectious diseases in the same building with practically no risk of cross-infection. At the present time a very large hospital is being constructed by the City of Brussels, at Jette-Saint-Pierre, and in connection with this scheme a most valuable work on hospital design and construction, entitled "La Construction des hôpitaux," has been produced by Drs. Depage, Vandervelde, and Cheval, three of the leading Brussels physicians. The type of hospital which they favor consists of one story, detached ward pavilions, connected together by open terraces, to form the departments for the different diseases. Their model unit comprises thirty beds, contained in two twelve-bed wards and six isolation wards. One of the best of the modern Dutch hospitals is the University Hospital at Utrecht, opened in 1908, for surgical, maternity, and gynæcological cases, with accommodation for about 170 beds. The plan shows a combination of corridor and pavilion systems in one building, generally of two stories. In Germany the great majority of the hospitals are provided and maintained by public funds, accommodation for four classes of patients being usually provided under the insurance system. The small and medium-sized general hospital, with an accommodation up to two or three hundred beds, as a rule, comprise a main building, containing the whole of the accommodation for the non-infectious cases and the administrative and domestic departments, whilst

(Continued page 83)



HIGH ALTAR, ST. PATRICK'S R. C. CHURCH, PHILADELPHIA.

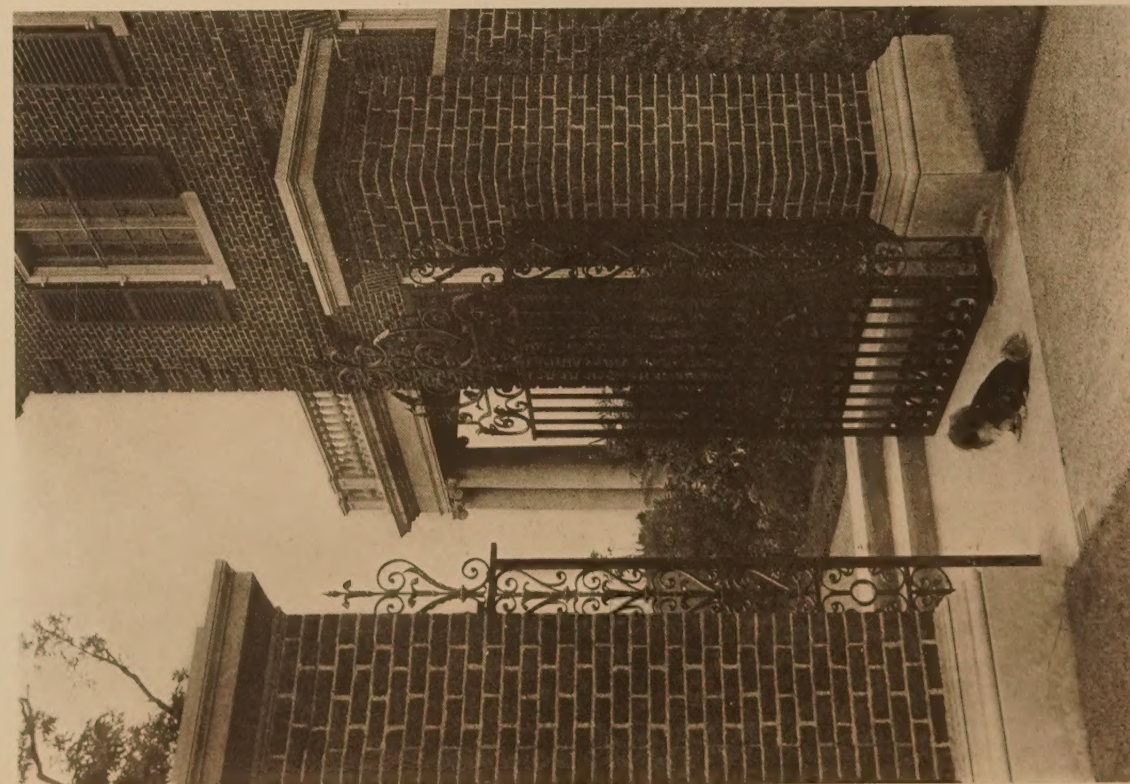
LaFarge & Morris, Architects.



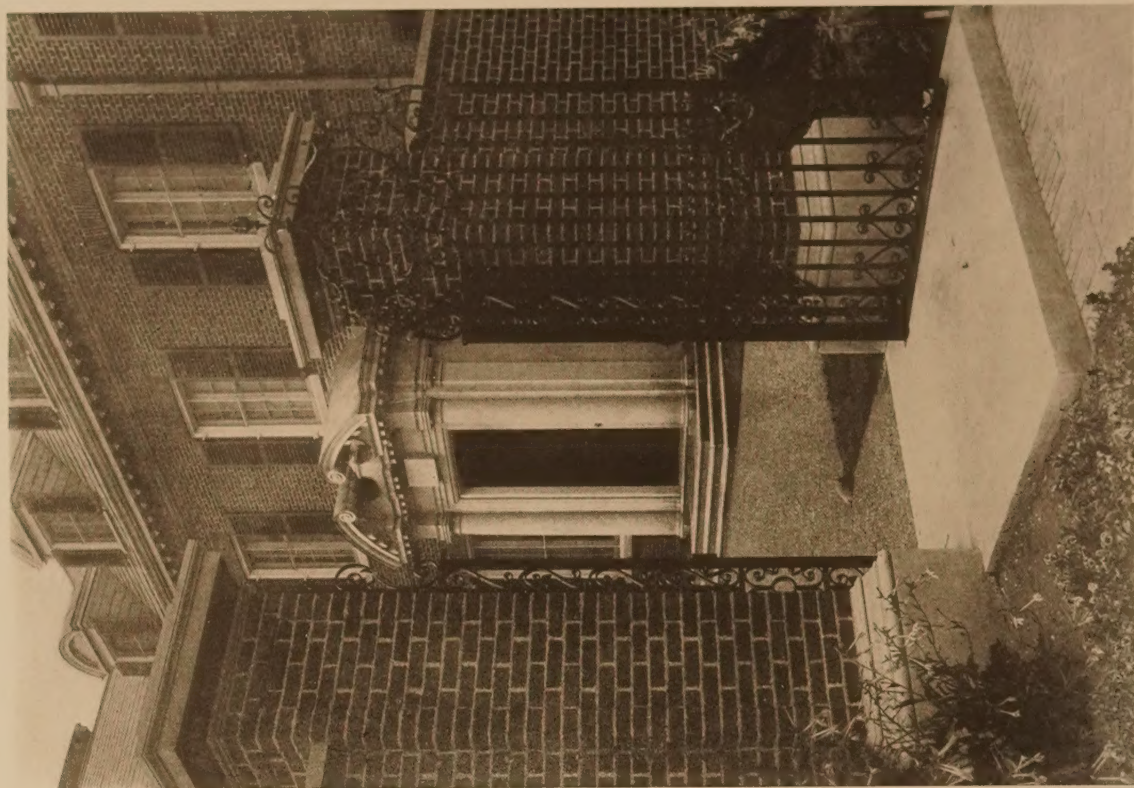
Cow and Hay Barns.



Dairy, Gardener's Cottage and Bothy.



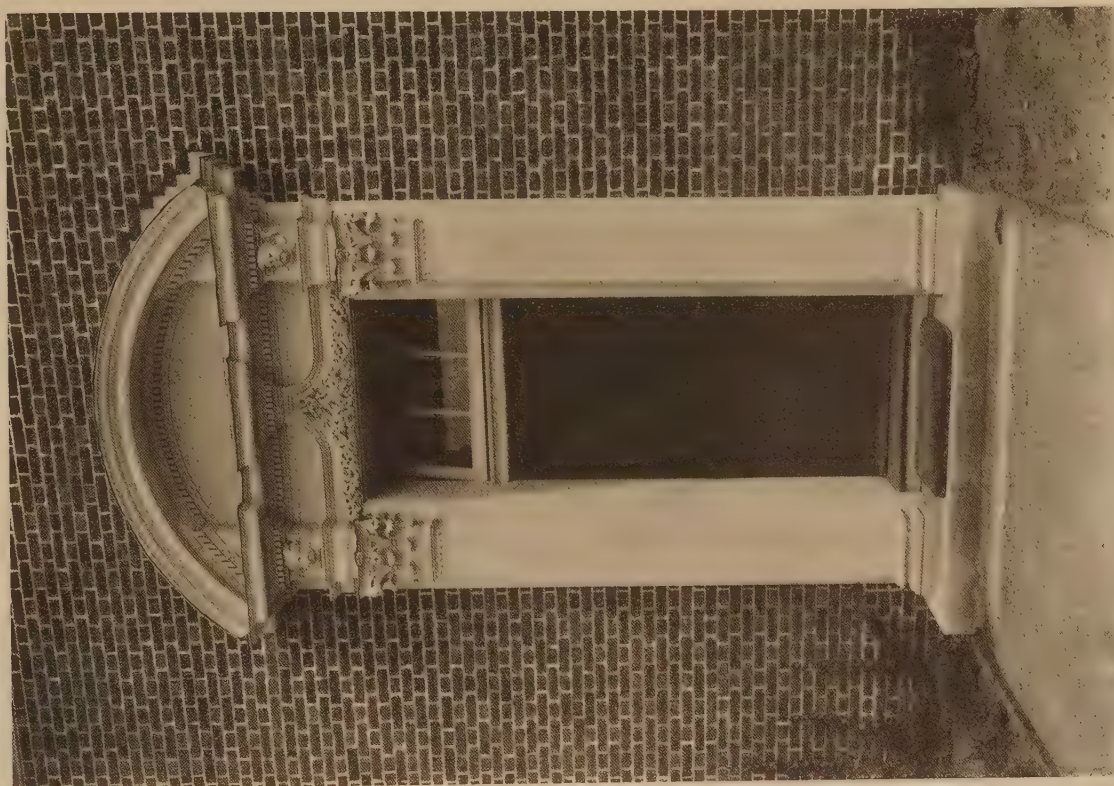
West Gate of Fore Court.



Fore Court from Garden.

LaFarge & Morris, Architects. Copyright, 1912. Johnston-Hewitt.

COUNTRY HOUSE ON LONG ISLAND.



Entrance to Squash Court—Old London Doorway Re-set.



Garage and Squash Court from Fore Court.

LaFarge & Morris, Architects. Copyright, 1912. Johnston-Hewitt.

COUNTRY HOUSE ON LONG ISLAND.



DETAILS, HOUSE, GEO. L. PRENTISS, MONTCLAIR, N. J.

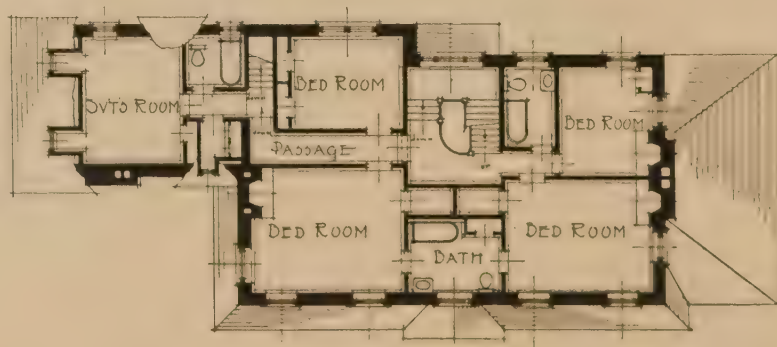
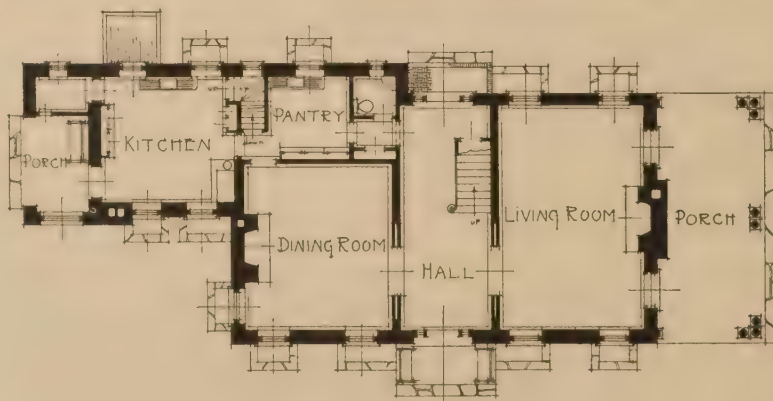


W. LESLIE WALKER AND G. H. CHICHESTER, ARCHITECTS.



HOUSE AND PLANS, GEO. L. PRENTISS, MONTCLAIR, N. J.

W. Leslie Walker and G. H. Chichester, Architects.



(Continued from page 75)

additional blocks are provided for the infectious cases, the technical service, and the pathological department respectively. The large municipal hospitals, which in some cases provide accommodation for as many as 2,000 beds, consist of separate buildings, arranged primarily in three main groups, those buildings for the general sick, those for infectious diseases, and those for general services and technical blocks; whilst common to all three groups are the administrative and pathological blocks. The blocks for patients are again subdivided into two main departments for medical and surgical cases, with their baths and operation blocks respectively attached, whilst separate blocks are provided for special diseases. Owing to the very varied requirements of different localities, there are no fixed types for the German hospitals, but Karlsruhe is an example of the general arrangement of the buildings in the modern German hospital. Here the complete department is arranged on the corridor pavilion system. At Vienna, amongst the numerous hospitals, there are none of outstanding merit, yet some of the modern additions are of very great value and interest. At Copenhagen a large hospital is in construction at the present time, the pavilions being planned on the corridor system, with all wards facing south.

In the United States the general hospitals, which admit all classes of disease, with the exception of infectious cases, and the special hospitals for contagious diseases are provided by the municipalities; whilst many of the religious bodies and charitable associations provide general and special hospitals. The Johns Hopkins Hospital, Baltimore, opened in 1889, is still one of the best hospitals in the United States, and is one of the most celebrated pavilion hospitals in the world. As originally designed, the majority of the pavilions were of one story, connected to one another by open terraces, whilst a closed corridor at the basement level of the pavilions and the ground-floor level of the administrative block connected the whole of the buildings together. The five pavilions to the south were, however, never constructed, and the site intended for them has been occupied recently by two most interesting buildings—the Phipps Psychiatric Clinic and the Harriet Lane Children's Hospital—each of five stories and of the corridor type of plan, a great contrast to the one-story pavilions as originally designed, and one which shows the changing methods of hospital construction. Additional buildings have also been erected upon the site, such as a pavilion for negroes and a tuberculosis dispensary; whilst the original isolation pavilion is now utilized as a maternity department, and a number of other alterations have been made.

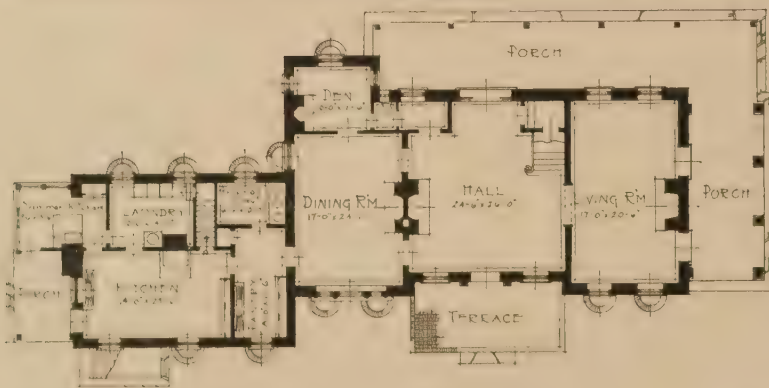
At Cincinnati the new general hospital, now approaching completion, the design of which is largely due to Dr. Christian R. Holmes, will undoubtedly rank as one of the great pavilion hospitals in the world. The site is some twenty-seven acres in extent, and when complete the hospital will accommodate 1,400 beds, and the pavilions generally are of three stories of wards, with a complete roof-ward on the fourth floor, whilst a corridor at the lower ground-floor level connects all portions of the hospital for all purposes. The typical ward unit is well worthy of careful study, the large ward containing twenty-four beds, and the details of the annexes, or "head house," as they are called in America, are most complete.

One of the outstanding features of the American hos-

pitals, which renders the problem to be solved of considerable difficulty, is the fact that, in the great cities, owing to the congestion and the high prices of land, the sites obtainable are of the most restricted character, necessitating the erection of high hospital buildings. There is also a general feeling against spreading the buildings out to an unnecessary extent, and so needlessly increasing the cost of upkeep administration, service, heating, lighting and cleaning. The New York Hospital, now in course of construction is 800 ft. long by 200 ft. wide, and about four acres in extent; but, as it adjoins the Hudson River and fronts on to a small park, it obtains the benefit of a considerable zone of aeration. The hospital will ultimately provide accommodation for about 600 beds, and there will be eight independent buildings, connected together by bridges, the majority being of five stories, whilst the two central ward blocks will be of seven stories. The large wards will contain twenty beds each, and the ward unit plan will be based on the T-shaped ward plan, introduced by Dr. S. S. Goldwater, Superintendent of the Mount Sinai Hospital, New York, who is consulting superintendent for the new buildings; it being claimed for this plan that it possesses certain advantages over the normal plan, and is necessary to adapt the pavilion type to the requirements of the restricted site. The Good Samaritan Hospital, Cincinnati, is designed somewhat on the lines of University College Hospital, London, with ward buildings radiating from a center, a type which is peculiarly appropriate to the restricted sites obtainable. The rebuilding of the Cook County Hospital at Chicago, now in course of construction, as a ten-story building, on the corridor type of plan, with projecting pavilion blocks, is a remarkable example of the multi-storied hospital. Canada possesses a number of interesting hospitals, notably the new general hospital at Toronto, in which the medical and surgical departments are planned on the group system, somewhat on the lines of the Glasgow hospitals, and Mexico also possesses some modern hospitals. The large wards of the American hospitals usually contain about twenty-four beds; but in Chicago, Dr. Ochsner strongly favors the six-bed ward as the maximum.

The author finally mentioned a few deductions and conclusions suggested by a comparative study of the institutions of these countries. When one compares the great pavilion hospitals of Germany and other countries with the majority of our own institutions, one is at once struck by the much greater size of the institutions of the former countries; by the entire dissociation of the kitchen and all service blocks from the administrative and patients' buildings; by the grouping of the patients' buildings into definite departments in accordance with the diseases; the reduction in the accommodation of the large ward, the number of special rooms in the ward unit, and the non-disconnection of the sanitary annexes; the much greater provision for special treatment in hydro-, electro-, and mechano-therapeutics; the greater provision for scientific work, research, investigation, and pathology; the provision of balconies and roof-wards for outdoor treatment; the excellent sites, and the remarkable laying-out of the gardens and grounds. It is mainly the medical requirements and considerations which cause the majority of the differences in the grouping and planning of the buildings in the hospitals of other countries, in comparison with our own institutions; from the points of view of hygiene, sanitation, and construction, our hospitals are

(Continued page 85)



(Continued from page 83)

well up to, and very often excel, those of other countries. It thus really becomes more a question for the medical rather than the architectural profession, to tell us whether, say, the typical German hospital is, or is not, superior, in its general arrangement and accommodation to our typical institution. Certainly the majority of foreign authorities and critics appear to consider that our typical general hospital, whilst possessing very many excellent points, is inclined to be somewhat stereotyped in its general arrangement and in the planning of the ward unit; but, on the other hand, there is a general opinion among foreign experts that our out-patient departments and our fever hospitals are superior to the majority of similar buildings in their own countries; and we often excel in the internal design of our large wards, such as the relation of the beds to the windows, the floor and cubic space. As to the size of hospitals, there is a very general feeling in Germany that the total accommodations of one institution should not exceed 1,500 beds. As to the dissociation of the kitchen and all service blocks from the administrative and patients' buildings, this is largely a question which depends on the size of the institution. Then as to the height of hospital buildings, American and our own institutions show that there is no objection to this type of construction in itself, but it is generally agreed that the high hospital is necessary only where it is impossible to obtain other than a restricted site. As to the differences that occur between the planning of our own and the Continental and the large wards, and to increase the size of the annexes, by providing a larger number of small wards, for the purpose of classifying the individual patients and diseases, both in the interests of the patients and of science, and also the provision of a greater number of rooms for special medical and service requirements, is one due almost entirely to medical considerations. The ideal, which, however, from practical consideration is impossible, is a separate ward and nurse for each acute case. One point, however, in which our typical ward units differ essentially from those of other countries is in the disconnection and planning of the sanitary annexes. Whilst there are undoubtedly certain points in favor of the disconnection of the sanitary annexes, I think that our typical ward unit plan, with its twin sanitary towers at the south end of the large ward, is one which can be modified with considerable advantage. At the present time, however, we are inclined in our construction to depart from accepted types, which is well seen in the recent additions to Glasgow Western Infirmary, where the bathroom is brought into the main building; in the selected design in the recent competition for Bradford Royal Infirmary, where, in addition to the bathroom being brought into the main building, the sanitary tower containing the water-closets and sink-room is placed at the entrance end of the large ward; and, finally, in the design for the Chelsea Hospital for Women, of which Mr. Keith D. Young is the architect, where none of the sanitary annexes are disconnected.

EVOLUTION IN DESIGN.

PRIMITIVE man scratched an outline of the mammoth on stones that have come down to us through the ages. The early Greek artist, following his Egyptian predecessor, drew, on vases, figures in pure outline. All

early effort in drawing, of rude nations, as of children, is essentially silhouetting. With experience and increase of technical skill comes an effort to foreshorten and to follow retreating and advancing curve and line. The master's hand strikes out, straight away in bold mass, main expressive features. To him, outline is something reflex—the outcome of solid modeling from within.

Years may elapse before it dawns upon the student that architecture is an affair of solids, not of superficies. He begins to lean less on the tee and set-square, and essays free design in perspective and in mass. His changing view indicates that, from an affair of horizontal and vertical lines and spaces, he has commenced to think in three dimensions, and to rise above the art of tile-pavement design. Some never seem to change their views, but remain lifelong designers in the flat, with little other idea than a vague one as to proportions, and a hankering after rule and module.

To the one student, architecture is a matter of ruling certain vertical and horizontal lines at varying distances; to the other, it is an affair of solid masses, to which detail is added for certain ethical reasons. While the one designer is pleased to pile order on order, and is much obsessed with the dead things of tradition, the other conceives arrangements of wall, pier, and arch with intent to a whole effect. Cap and base are secondary to the prime effect of uprising pier and shadowy arch. He thus evolves a "design"—an idea of something telling its special story whilst serving a practical purpose: it may be of mystic interior or majestic exterior. To such a designer, detail is something that he intelligently, and of set purpose places at certain points, with the object of enhancing a main effect seen by him from the beginning.

In evolving a design, we can proceed from the beginning in one of two ways: we can either fix the attention on the bare features of geometric architectural device, or preconceive, say, a dark recess against light piers at the end of an elegant perspective of dappled-gray wall, arch, and column. The former procedure will be that of the elevationist, who will likely be much concerned with the correctness of his ancient Corinthian proportions. All he will ever have conceived before the builder has cleared away his scaffolding will be a flat facade of piers, and arches and sections of domed vaults. With his mental eye the true architect will have long foreseen the light-and-shade effect. He may well argue that no great benefit to anyone results from slavish reproduction of old form as such, but that if he can produce an interesting whole effect, something novel may be graciously set before the beholder without relying on parodies of old buildings, with details warped, distorted and senselessly turned inside out.

In many cathedrals and churches a perspective of shadowy aisle culminates in a glowing stained-glass window. To those finding sufficient interest and inspiration in dry architectural form—that is to say, irrespective of and void of any special effect obtainable from such form—the whole conception will be a matter of machine-worked elevation. An artist would commence by massing out this main effect as a theme, and whether he employed equilateral or low-centre arches, or this or that moulding, would be secondary considerations. His quest is the final beauty he desires to put before us. Either that is so, or we must regard all such first impression effects as the children

(Continued page 87)

(Continued from page 85)

of chance and haphazard. If the poetic in building results from such preconception and forethought, it can be understood how little we interest ourselves in mere formal architectural device, set up for its own sake rather than for use and purpose; and how we may become sick of present-day commercial architecture in endless series; how our feelings warm towards some solitary building, or isolated bay, or columned group, that conveys real delight and interest!

The practical suggestion here advanced is that we should more frequently mass out beautiful themes before concerning ourselves with final architectural form, and this not solely as to the whole, but also as to part. The elevationist draws four lines: it is a column. The artist blocks out a vertical streak of black, white, and gray, and, if circular, by a few bold, sweeping lines gives the effect of drum-joints and necking contrasting and harmonizing with cap and abacus. To the grouper of architectural form, as distinct from the masses of light and shade, a colonnade is a mere repetition of a certain number of the above four lines, plus lines to represent horizontal entablature and raking pediment. The designer in perspective visualizes the play of light on the columns and the shadow under architraves as it breaks about the rugged wall-surface or dapples a second columniation. He first concerns himself with certain masses of light and shade; volute and acanthus are for after-consideration, whereas these latter form the main theme of the raw recruit in architectural composition. An interior on our plan becomes at first a blotch of light and dark. These are the results of mental vision. Certain effects are preconceived, or a nebulous idea thereof, which, under the action of a mind seeking definite evolution of that which is at first vague and shadowy, become clear-cut entities.

Design is either ex-nebule or mathematically lucid. The former is the method in art, the latter in science and engineering; and in art matters it is worth while considering whether it is not an excess of this designing, straightway and complete from scale and compass to paper, that brings about lack of poetic conception and absence of really good effect. We may transfer 50 feet by 30 feet to paper for a plan dimension, and 20 feet for height, and let things go at that. It is the easiest way, and perhaps the most immediately remunerative way. But the artist must worry these dimensions—look upon them as tentative, as indicating a variable mass that may be curtailed, enlarged, widened, lowered, cut back, from and into, and all taking shape in harmony with the power of visualizing. For the mere draughtsman, nothing is better than the definite mathematical method, straight from scale to paper, and thereon by firm hand definitely put down in terms of two dimensions while thinking in three. For the artist, it is doubtful, whether such method is possible, except when his necessities compel the production of "pot-boilers."

PHONE, MADISON SQ. 647

ELWYN E. SEELYE

ASSOC. M. AM. SOC. C. E.

CONSULTING ENGINEER IN

REINFORCED CONCRETE—STRUCTURAL STEEL—FOUNDATIONS

FIELD INSPECTION
REPORTS

DESIGNS
ESTIMATES

38 WEST 32D STREET, NEW YORK



The Administration Building of Armour & Company is equipped with **Eye Comfort Lighting**

The total floor area illuminated is 113,750 feet—and the number of outlets approximate 1,100.

Eye Comfort Lighting was installed in this building, following most exhaustive tests of leading types of direct, "semi" indirect and indirect lighting. We will be glad to send you detailed information concerning these tests and the results. Every thorough, impartial test which has been made, has resulted in an installation of the Eye Comfort Lighting System.

All of the interior photographs shown above were taken at night and solely by Eye Comfort Lighting—no flash light was used. This shows how uniform as well as perfect a light is produced by this system.

**Request an Engineering Report on Your
Own Lighting Problems—FREE.**

Send us the blue prints showing the interior arrangements of buildings on your boards.

NATIONAL X-RAY REFLECTOR CO.

245 W. Jackson Blvd., CHICAGO

505 Fifth Avenue, NEW YORK

BOOK REVIEWS.

THE MEDIEVAL CHURCH ARCHITECTURE OF ENGLAND.

Charles Herbert Moore, 1912. The MacMillan Company, N. Y. Cloth \$3.50 net.

Owing to English partiality on one hand, or to foreign prejudice on the other, it has been impossible, heretofore, to obtain an unbiased treatise on the structural features of the mediaeval churches in England. The book is critical, with a purpose of setting forth this work in comparison with the French Gothic Art.

The text is analytical and profusely illustrated with photographs and explanatory drawings.

AMERICAN COUNTRY HOUSES OF TO-DAY. Preface by

Ralph Adams Cram, Litt. D. 1913. The Architectural Book Publishing Company, New York. Nearly 200 pages of half-tone plates. Cloth binding. Price \$12.50.

It has been most fortunate that American domestic architecture has been given wide publicity through the professional journals and special books.

The country house has come in for more than usual attention—perhaps because of its possibilities for greater freedom in style and treatment and for the landscape setting which cannot be obtained for the city or town house. Immediately following the Dark Ages of country house work (1830-1880) there came a really earnest effort for the production of something better than the hodge-podge of Queen Anne and shingle.

Our later work is logical, coherent, organic, beautiful, distinguished and comfortable. The publication of "American Country Houses of To-Day" is a valuable record of recent houses—East and West, North and South—many of which will serve as inspiration for the design and execution of worthy houses of moderate cost.

THE ARCHITECT IN RELATION TO HIMSELF.

SPEAKING, in his presidential address to the Royal Institute, of the position of the architect in the personal sense, Professor Blomfield said—"There is a real danger, in all this whirl of architectural politics, of our forgetting that first of all we are artists, and that the art which we practice is a very great and a very old one. The cares of business, the keenness of competition, the feverish haste of modern work, are apt to reduce the lamp of art to the merest flicker, if they do not put it out altogether. Those of us who have wide experience of practice know how difficult it is to keep that lamp alight, but here I am addressing myself not to my seniors and contemporaries, but to our younger members—to those who will take our places and carry on our work. Scholarship and research have always been among the best tradition of this Institute. If you turn over the pages of the earlier volumes of our transactions, you will find papers on matters of serious interest, marked by a learning and ability that give them a permanent value in architectural literature. I hope, and I do not doubt, that that tradition will be worthily maintained by the rising generation. Current politics may be fascinating, but they are the outside of the cup and platter; they are a very poor substitute for that patient forging and perfecting of your artistic armament which will enable you later to practice your art with the enjoyment that comes of real mastery. And to those that have enthusiasm this labor will be a perennial delight, the joy that is to be won from the study of past art.

"Who of us, after all, does not look back with vivid pleasure to those wrestling with the mysteries of some great cathedral, quiet hours with pencil, note-book, and 2-ft. rule spent in some exquisite chapter-house, long autumn rambles

among the time-worn buildings of historic cities? These things are the privilege of the architectural student, and it is this touch with the past that gives to our work its abiding interest. You may recollect the old Greek game of the Lampadephoria, where runners took torches lit at the altars of Prometheus, Athene, and Hephaistos, and passed them from hand to hand till they reached the winning post. That, gentlemen, is our position. It is our business to hand on the torch of architecture. Some of us may be getting old and stiff in the joints and may have to content ourselves with painfully nursing the flame. It is for you of the younger generation so to train yourselves in your calling that, when the torch is passed into your hands, you may fan it to more vigorous life, and enable it to shine again with all the splendid brilliancy of the great ages of architecture."

Tapestrolea Treatments of Burlaps and Canvases for Decorative Purposes

Decorators and architects will find a collection of great value, especially for interiors, hotels, clubs and public buildings. Our Artist will co-operate with Architects and Decorators in planning and arranging decorative schemes.

Sample Books Furnished Upon Request

RICHTER MFG. CO., - TENAFLY, N. J.
NEW YORK SALESROOM, 131 East Twenty-third Street



PHONE 6928 COLUMBUS.

Our CONSULTATION DEPT.
is at your service—concerning the style
treatment and finish of Engravings best
adapted to illustrate, in one or more
colors, to the most economical and
other advantages, your Booklets
and Advertisements, etc.

GATCHEL & MANNING
DESIGNERS and ENGRAVERS in one or more colors
PHILADELPHIA
SIXTH and CHESTNUT STS.